|  |
| --- |
| UK Space Agency: International Partnerships ProgrammeMonitoring & Evaluation (M&E) Tools and Techniques |

[Owner: Caribou Digital. Produced for: UK Space Agency, Version 3.0]

This document is a compilation of the tools and techniques that can be used to support the implementation of the M&E activities of the IPP grantee projects. It provides a summary of the tool/technique and links to supporting materials/reading.

Note: there are some variances in terms and templates in the various references, so please use those provided during the Call process, or refer to Caribou if unclear.

Contents

Contents 1

Tools or M&E Planning 2

Theory of Change 2

Logical Framework (Logframe) 2

Monitoring and Evaluation Plan 3

Tools for Data Collection 4

Statistics – Open Datasets 4

System Data 4

Surveys 4

Interviews and Focus Groups 5

Types of Evaluation and Evaluation Methods 6

Evaluation Criteria 6

Impact Evaluation 6

Process Evaluation 7

Economic Evaluation: Cost-effectiveness Analysis (CEA) 7

Most Significant Change 7

Outcome Mapping 7

Evaluation Timing: Baseline, Midline and Endline Evaluations 8

Approaches to Impact Analysis in Evaluations 9

Counterfactual 9

Comparison/Control Groups & Randomised Control Trials 9

Difference in Difference 9

Delphi Method 10

Measuring Behavioural/Capacity Change (Knowledge, Attitudes and Practices - KAP - Assessments) 10

Data Analysis 11

Qualitative Data Analysis and Coding Schedules 11

Quantitative Data Analysis: SPSS, R, and Excel 11

Reporting and Incorporating Findings 12

Data Visualisation 12

Management Response 12

Miscellaneous Further Reading 13

# Tools or M&E Planning

## Theory of Change

The Theory of Change is a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. It is an explanation of how you expect your programme to result in the ultimate changes you seek. It provides the logical explanation and flow between project inputs and activities, to project outputs, to outcomes and finally to impact. It is typically provided as both a written narrative and a diagram. For evaluations, a Theory of Change is rapidly becoming a standard expectation for developing an evaluation framework. This is because it lays out the 'expected story' of the project in advance, thus provides an explicit framework for assessing the long-term results against. However, (unlike a logframe) a theory of change in and of itself does not include any thinking about data collection or how an impact assessment will be managed. A clear Theory of Change is usually the foundation for creating a results framework (like a logframe).

See:

[Theory of Change Basics (Act Knowledge)](http://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/ToCBasics.pdf)

[How does Theory of Change Work? (TheoryofChange.org)](http://www.theoryofchange.org/what-is-theory-of-change/how-does-theory-of-change-work/)

##

## Logical Framework (Logframe)

A Logical Framework (logframe) is one of the most common planning, monitoring and evaluation tools used to describe the anticipated chain of cause and effect in development interventions. A logframe is based on a simple grid, and describes what a project needs to do to achieve its impacts through a hierarchy of activities, outputs, outcomes and impacts. Originally devised as a planning tool, logframes are used for M&E as they lend themselves to the monitoring of outputs and outcomes, and assessing the effectiveness and efficiency of a project's delivery.

Logframes should include quantified **SMART** targets (**S**pecific, **M**easurable, **A**chievable, **R**elevant and **T**ime-bound), indicators for measurement, plans for verification of indicators and key assumptions.

See:

[The logical framework (INTRAC)](https://www.intrac.org/wpcms/wp-content/uploads/2016/06/Monitoring-and-Evaluation-Series-The-logical-framework-12.pdf)

Further Reading:

[How to write a logical framework (Tools 4 Dev)](http://www.tools4dev.org/resources/how-to-write-a-logical-framework-logframe/)

[Monitoring and Evaluation: Some Tools, Methods and Approaches (World Bank)](http://siteresources.worldbank.org/EXTEVACAPDEV/Resources/4585672-1251481378590/MandE_tools_methods_approaches.pdf)

[Theory of Change vs Logical Framework – what’s the difference?](http://www.tools4dev.org/resources/theory-of-change-vs-logical-framework-whats-the-difference-in-practice/)

## Monitoring and Evaluation Plan

An **M&E Plan** is a guide as to what you should monitor and evaluate, what information you need, and who you are evaluating for. It is the central repository for all project M&E plans, and reference tool that guides M&E activities throughout the project.

The plan outlines the key evaluation questions and the approach to monitoring that will help to design evaluations and data collection activities. This allows you to identify the information you need to collect, how you can collect it, and who will collect it. The plan should be able to be picked up by anyone involved in the project at anytime and be clear as to what is happening in terms of monitoring and evaluation.

A data collection table/matrix is a critical tool for planning and managing data collection, analysis, and use. This is a table that is usually included in a wider M&E plan. It expands the Logframe to identify key information requirements for each indicator and summarizes the key M&E tasks for the project. This would include indicators, method of verification/data source, use of comparison group, who will collect, frequency, storage location of data.

See:

**Provided by Caribou Digital - Grantee Template M&E Plan**

Further Reading:

[Developing a Monitoring & Evaluation Plan (Evaluation Toolbox)](http://evaluationtoolbox.net.au/index.php?option=com_content&view=article&id=20&Itemid=159)

[The Magenta Book Guidance for Evaluation (UK Treasury)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf)

[Handbook on Planning, Monitoring and Evaluating for Developing Results (UNDP)](http://web.undp.org/evaluation/evaluations/handbook/english/documents/pme-handbook.pdf)

# Tools for Data Collection

## Statistics – Open Datasets

Several international institutions publicly release open data datasets, which enable projects to collect secondary data, which is cost effective, internationally benchmarked and robustly measured. Although not always collected on an annual basis, many of these publications regularly release national level data on a broad range of indicators - ranging from IPP relevant issues like % of forest area, crop yields, agricultural prices and inputs, deaths from natural disasters, and more. Because this data is usually captured at the national level, it will not be able to measure specific change as a direct result of an IPP project. However, they can assist in the triangulation of data from internal project sources, and to highlight national or regional trends in comparison to individual project results. Furthermore, data from these sources are often used to report globally on SDG level indicators.

See:
[Gapminder](https://www.gapminder.org/data/)

Further Reading:

[World Bank Open Data](http://data.worldbank.org/)

[OECD.Stat](http://stats.oecd.org/)
[FAOSTAT](http://faostat.fao.org/)

## System Data

Use of data from project systems will likely be one of the most common sources of primary data collected for M&E. This may include data automatically generated by the project, like tracking the number of users of a particular system, the size or number of illegal logging events detected by a system etc. Especially at the output level, many indicators should include means of verification that come from project systems data.

See: N/A

Further Reading: N/A

##

## Surveys

Formal surveys can be used to collect standardised information from a carefully selected sample of people or households. Surveys often collect comparable information for a relatively large number of people in particular target groups. Surveys are often used to collect qualitative indicators for example about behavior or decision making changes following a project intervention.

See:

[Monitoring and Evaluation: Some Tools, Methods and Approaches (World Bank)](http://siteresources.worldbank.org/EXTEVACAPDEV/Resources/4585672-1251481378590/MandE_tools_methods_approaches.pdf)

Further Reading:

[How to do great semi-structured interviews (Tools 4 Dev)](http://www.tools4dev.org/resources/how-to-do-great-semi-structured-interviews/)

[How to write awesome survey questions – Part 1 (Tools 4 Dev)](http://www.tools4dev.org/resources/how-to-write-awesome-survey-questions-part-1/)

[How to write awesome survey questions – Part 2 (Tools 4 Dev)](http://www.tools4dev.org/resources/how-to-write-awesome-survey-questions-part-2/)

[5 ways to measure qualitative results (Tools 4 Dev)](http://www.tools4dev.org/resources/5-ways-to-measure-qualitative-results/)

[How to choose a sample size (for the statistically challenged) (Tools 4 Dev)](http://www.tools4dev.org/resources/how-to-choose-a-sample-size)

[Online-based survey software… 5 pointers to look out for (Tools 4 Dev)](http://www.tools4dev.org/resources/online-based-survey-software-5-pointers-to-look-out-for/)

## Interviews and Focus Groups

One on one (usually semi-structured) interviews are an effective way to get detailed information from informants that is not restricted by the constraint of a survey, or too personal to discuss in focus groups. Semi-structured interviews are based on a few, pre-defined questions (usually 7-10), and the interviewer (trained in qualitative interviews, has space to add specific, individual follow up questions based on the informants responses. Interviews are best suited when you are seeking personal, individual responses on topics that involve their needs, opinions or decision-making processes.

Focus groups on the other hand, are best suited when you want information to interact, and generate new ideas through brainstorming. Particularly useful in project design, and early stages of intervention, focus groups can help generate ideas about 'what isn't working' and what 'could work better'.

See:

[Should I use interviews or focus groups? (Tools 4 Dev)](http://www.tools4dev.org/resources/blog/use-interviews-focus-groups/)

## Sample Size

Once decided you will be using surveys for data collection, you will have to choose a sample size. To help you define how big your sample size should be, here are a few easy rules of thumb regarding sample sizes:

* The minimum sample size is 100

Most statisticians agree that the minimum sample size to get any kind of meaningful result is 100. If your population is less than 100 then you really need to survey all of them.

* A good maximum sample size is usually 10% as long as it does not exceed 1000

For example, in a population of 5000, 10% would be 500. In a population of 200,000, 10% would be 20,000. This exceeds 1000, so in this case the maximum would be 1000. Even in a population of 200,000, sampling 1000 people will normally give a fairly accurate result. Sampling more than 1000 people won’t add much to the accuracy given the extra time and money it would cost.

* Choose a number between the minimum and maximum depending on the situation

The actual number you choose will depend on factors such as how much time and resources you have available to you; how important it is to get accurate results or if you’re only need a rough estimate of results; whether you plan to divide the sample into sub-groups during analysis; how different you expect the answers given to be and if the decisions you make based on the results have significant consequences. That said, in practice most people normally want the results to be as accurate as possible, so the limiting factor is usually time and money.

See:

<http://www.tools4dev.org/resources/how-to-choose-a-sample-size/>

# Types of Evaluation and Evaluation Methods

## Evaluation Criteria

Evaluations are typically carried out using the OECD Development Assistance Committee (DAC) criteria. Grantees will be expected to plan for, and conduct evaluations that assess their project against the following criteria.

* **Relevance:** The extent to which the aid activity is suited to the priorities and policies of the target group, recipient and donor.
* **Effectiveness:** A measure of the extent to which an aid activity attains its objectives.
* **Efficiency:** Efficiency measures the outputs -- qualitative and quantitative -- in relation to the inputs. It is an economic term, which signifies that the aid uses the least costly resources possible in order to achieve the desired results.
* **Impact:** The positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators. The examination should be concerned with both intended and unintended results and must also include the positive and negative impact of external factors, such as changes in terms of trade and financial conditions.
* **Sustainability:** Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be environmentally as well as financially sustainable.

With these evaluation criteria in mind, you can start considering which type of evaluation and which approach you will carry out for your project. Choosing the best approach will depend on various different factors such as time and resources available for the evaluation, aims of your project, reporting requirements and number of participants available for the evaluation. It is possible to combine elements of different approaches into your M&E plan. Mixed evaluation methods are actually very often the most appropriate choice as they can be customised to the specifics of the project. Mixed methods can be the right choice as long as they are well suited to answer your evaluation question(s).

See:

[DAC Criteria for Evaluating Development Assistance](http://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm)

##

## Impact Evaluation

Impact evaluation is the systematic identification of the effects – positive or negative, intended or not – on individual households, institutions, the economy and environment caused by a given development activity such as a project. Impact evaluations can range from large scale sample surveys in which project populations and control groups are compared before and after, and possibly at several points during program intervention; to small-scale rapid assessment and participatory appraisals where estimates of impact are obtained from combining group interviews, key informants, case studies and available secondary data. This kind of evaluation attempts to estimate the counterfactual – that is, what would have happened to the outcome of interest had the programme not taken place – by controlling for other factors, which might have caused the observed outcome to occur.

See:
[The Magenta Book Guidance for Evaluation (UK Treasury)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf)

Further Reading:
[Monitoring and Evaluation: Some Tools, Methods and Approaches (World Bank)](http://siteresources.worldbank.org/EXTEVACAPDEV/Resources/4585672-1251481378590/MandE_tools_methods_approaches.pdf)

[Impact evaluation (Better Evaluation)](http://betterevaluation.org/en/themes/impact_evaluation)

[Plan and manage an evaluation (Better Evaluation)](http://betterevaluation.org/start_here/plan_manage_evaluation)

[DFID Evaluation Policy 2013](http://www.oecd.org/derec/unitedkingdom/DFID-Evaluation-Policy-2013.pdf)

## Process Evaluation

Process evaluation is a method of assessing how a programme is being implemented. Process evaluation focuses on the programme's operations, implementation, and service delivery. Questions relating to how a programme was delivered are addressed in a process evaluation. It covers how efficiently activities were delivered in terms of time and resources. Process evaluations will often include the collection of qualitative and quantitative data from different stakeholders, using, for example, group interview, one to one interviews and surveys. In a process evaluation you will be tracking the implementation of activities against plans, schedules and budgets, delivery of outputs, and relationships between key stakeholders.

See:

[The Magenta Book Guidance for Evaluation (UK Treasury)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf)

##

## Economic Evaluation: Cost-effectiveness Analysis (CEA)

CEA is a form of economic evaluation, which values the costs of implementing and delivering the programme, and relates this amount to the total quantity of outcome generated, to produce a “cost per unit of outcome” estimate (e.g. cost per additional individual placed in employment)

See:

[The Magenta Book Guidance for Evaluation (UK Treasury)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf)

[How to do a basic cost-effectiveness analysis (Tools 4 Dev)](http://www.tools4dev.org/resources/how-to-do-a-basic-cost-effectiveness-analysis/)

Handbook of Practical Program Evaluation (Chapter 21)

##

## Most Significant Change

​Most Significant Change (MSC) is a participatory approach to M&E which is typically used to collect stories of change from final beneficiaries of a project (whom it is often difficult to predict or measure how a particular intervention has changed their circumstances in life), however can be used along the entire impact chain to identify and present stories of change with partners, direct beneficiaries, indirect beneficiaries etc. As an approach, it involves collecting stories from people (oral or written) from across the organisation/network at the end of the project and selecting those, which better capture the kind of impacts the project was aiming for. The emphasis of these stories is on the change that has occurs because of the project. The focus is entirely on collecting qualitative information, and thus can be used to complement other indicator driven or quantitative approaches, or as a standalone bottom­-up approach to evaluation. There is an emerging approach to code qualitative data gathered (using some of the software applications listed below), in order to identify and analyse trends from the stories collected, to make a more robust, stand­alone technique from MSC.

See:

[The ‘Most Significant Change’ (MSC) Technique](http://www.mande.co.uk/docs/MSCGuide.pdf)

## Outcome Mapping

Outcome Mapping (OM) is a comprehensive, participatory planning, monitoring and evaluation methodology. Going beyond just results based evaluation, it helps the programme to be specific about the actors it targets (boundary partners), the changes it expects to see and the strategies it employs.

​OM is an approach that spans planning (called Intentional Design), monitoring and evaluation. The initial intentional design process is (usually) a facilitated workshop to articulate a theory of change, including objectives, strategies, monitoring priorities and evaluation plans. These plans are then turned into 3 types of monitoring journals (on outcomes, strategies and performance), which are used for periodic self ­reflection (at frequencies decided collaboratively). OM is focused on making the assumptions that the project has about how change happens explicit. Developing progress markers that make the change process clear helps all the stakeholders see their achievements by tracking the connection between what they do and what happens. While OM can be a time intensive process to set up and monitor, it does focus on capturing the incremental changes which allows the evaluators to put together a more complete picture at the close of the evaluation.

See:

[Outcome Mapping: A method for tracking behavioural changes in development programs (Outcome Mapping)](http://www.outcomemapping.ca/resource/outcome-mapping-a-method-for-tracking-behavioural-changes-in-development-programs)

For further reading:

[OUTCOME MAPPING Building learning and reflection into development programs (IDRC)](https://www.idrc.ca/en/book/outcome-mapping-building-learning-and-reflection-development-programs)

##

## Evaluation Timing: Baseline, Midline and Endline Evaluations

A baseline evaluation is an assessment of a project's starting point, used for comparisons later on (in mid and endline evaluations). It is a measurement of each key project indicator to capture a comprehensive picture of conditions before intervention.

A midline evaluation is an interim assessment of achievements and progress to date. Its focus is on assessing the degree to which the project is on track to achieve its intended outcomes and impacts, and identify changes needed in the project delivery (or M&E structure) in the remaining delivery time to ensure that KPIs, deliverables and results will be achieved. It should not only be a measurement of indicators in the project logframe, but also consider key evaluation questions and DAC criteria, as defined in the M&E plan.

An endline (also referred to as summative, or ex-post) evaluation is conducted at the end of a project and is focused on assessing the final results (outcomes and impacts) of the project. It is similar to a mid-line, in terms of the questions asked, approaches used and general focus, however the outcome of the evaluation (rather than being recommendations for the final delivery window) are recommendations and identified key learnings for future projects. Beyond the on-going project monitoring there will be at least three times in your project in which evaluations will be carried out.

# Approaches to Impact Analysis in Evaluations

Impact measurement is the process of trying to identify and quantify the (social, economic and environmental) effect of an intervention (like a project) on its targets. To understand the effect of the intervention there are a number ways of quantifying effect - including comparing results achieved to starting conditions, to comparison groups, to educated estimates of what would have happened in the absence of an intervention etc.

## Counterfactual

A key to good impact evaluation is obtaining a reliable estimate of the counterfactual: what would have occurred in the absence of the programme. This is frequently a significantly challenging part of impact evaluation, because of the often very large number of factors, other than a programme itself, which drive the kinds of outcome and impact measures e.g. macroeconomic changes, wider government policy, environmental factors etc. There are various approaches to impact evaluation, which can be used to attempt to isolate the impact of the policy from all these other drivers. The success of these approaches largely depends on their ability to establish a counterfactual through obtaining what are called “comparison (or control) groups”.

See:

[The Magenta Book Guidance for Evaluation (UK Treasury)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf)

## Comparison/Control Groups & Randomised Control Trials

Comparison groups are used to make a comparison between those who have been exposed to a project and those who have not. A traditional and simple example of this is a medical drugs trial where one group of participants (the “treatment” group) receives a new drug and the other (the “comparison” or “control” group) receives a placebo. Who actually receives the drug or the placebo is decided by chance, through a formal randomisation process. Then, so long as the treatment and control groups are similar in all other relevant respects, they can act as comparisons for one another. If there is then any difference in observed outcomes between the two, it can reasonably be assumed (under certain technical assumptions) that the difference is due to the policy (treatment). In development projects it is often difficult to create a truly random, blind, control group and often an approximate “comparison” group is identified and tracked instead. This could be a selection of farmers in another part of the country where a project is taking place who will not benefit from access to satellite data for example, or the changes in forest cover in another (neighboring) country not directly affected by project outcomes.

A randomised control trial (RCT) is a study design that randomly assigns participants into an experimental group or a control group. As the study is conducted, the only expected difference between the control and experimental groups in a RCT is the outcome variable being studied.

See:

[The Magenta Book Guidance for Evaluation (UK Treasury)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf)

Further Reading:

[Selecting a Control Group in Evaluations/Randomised Control Trials (Monitoring & Evaluation Blog)](https://evaluateblog.wordpress.com/2013/05/05/selecting-a-control-group-in-evaluations-randomized-control-trials/#more-10)

[Randomized Controlled Trial (RCT) (Better Evaluation)](http://betterevaluation.org/en/plan/approach/rct)

## Difference in Difference

When a truly random control group, or even a perfect comparison group cannot be established, an alternative method of assessing impact is to use a 'difference in difference' assessment. This method looks at two potential target populations and measures both of their baseline conditions (which do not have to be the same. After one of the groups has been exposed to the project, both are again measured (against the same indicators). The impact then is not the change in the project group alone, after the intervention, but the amount of difference, when compared to the change that also happened in the 'control' group. Because this method does not need a comparison of a like group to the intervention group, it is far less data hungry. Instead, it works by comparing trends between groups over a time period relevant to the intervention. Any significant difference in trends is interpreted as a project effect.

See:

[The Magenta Book Guidance for Evaluation (UK Treasury)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf)

## Delphi Method

The Delphi method is a communication method aimed at generating consensus. In M&E, it is used to generate consensus about forecasting 'what would have happened' without an intervention. It solicits opinions from groups in an iterative process of answering questions. After each round the responses are summarised and redistributed for discussion in the next round. Through a process of convergence involving the identification of common trends and inspection of outliers, a consensus is reached.

This technique can be used in various evaluation tasks to predict future data for instance in assessing the ‘problem’ the program aims to solve and forecasting future changes. The Delphi technique can also be applied in retrospect if monitoring and evaluation data is lacking and an evaluator seeks to gather it from stakeholders. Due to its quantitative, expert-based nature it is especially useful in judgment and forecasting of situations in which pure model-based statistical options are not practical.

See:

[Delphi Study (Better Evaluation)](http://betterevaluation.org/en/evaluation-options/delphitechnique)

## Measuring Behavioural/Capacity Change (Knowledge, Attitudes and Practices - KAP - Assessments)

Outcomes related to changes in the capacity (or knowledge, attitudes and practices) of individuals can often be multiple and difficult to measure. Behavioural changes are often measured through the Knowledge-Attitude-Practice (KAP) methodology developed in the 1950s. It involves defining specific variables per element that a project is concerned with (for example, knowledge of EO data and analysis techniques, attitudes towards the effectiveness of EO for a particular purpose and regularity of use of datasets), then regularly assessing key project stakeholders against these variables to monitor for changes.

See:

[A Guide to Developing Knowledge, Attitude and Practice Surveys (World Health Organization)](http://apps.who.int/iris/bitstream/10665/43790/1/9789241596176_eng.pdf)

# Data Analysis

## Qualitative Data Analysis and Coding Schedules

In data analysis, coding is a process where data (both qualitative and quantitative) is categorised and indexed for analysis. Data is combined into themes, ideas, concepts, keywords and categories then marked with a code label for comparison at a later stage. Once the data (such as a piece of text) is codified it can be read by computer software and used for statistical analysis. For example, in an EO project where data is collected through interviews and focus groups with farmers, pieces of interview transcript may be coded into specific themes, for example when informants discuss changes in income, weather patterns, market prices or otherwise.

For the analysis you will need to prepare a coding schedule. This consists of a table in which each column contains a predefined theme for the analysis and the rows show the units for the data collected. For the above example, a coding schedule would explain all the different themes, ideas or concepts (like income, weather or prices) that would be analysed against. A coding manual is then created to accompany the coding schedule, which lists the codes for each category.

Below is a description of software programmes that can be used for data analysis.

See:

[Equal Access Participatory Monitoring and Evaluation toolkit](http://betterevaluation.org/sites/default/files/EA_PM%26E_toolkit_module_5_QDA_for_publication.pdf)

##

## Quantitative Data Analysis: SPSS, R, and Excel

SPSS is a statistical package that is used to manage and analyse qualitative and quantitative data. It enables users to run complex analyses of data to understand trends, correlations and other statistical information. It requires little experience with statistics to be able to manipulate complex data sets. It requires data, for example gathered in a survey, to be coded before it can be processed and is particularly strong and showing the relationships between different sets of responses.

R is a free and open source programming language, which performs highly complex statistical calculations, however requires a significant knowledge of statistics and coding, as it has no graphical user interface. It is as, if not more powerful than SPSS, but the entry barrier is often high for those without prior knowledge of computer programming - however a large community of R users for M&E exists online.

Excel is the most basic tool used for data analysis as it is relatively affordable, easy to use and produces high quality graphs from data.

See:

[SPSS for data processing](https://www.shef.ac.uk/lets/strategy/resources/evaluate/general/data-analysis/spss)

# Reporting and Incorporating Findings

## Data Visualisation

There are a number of (web-based) tools for data visualizations and dashboard reporting which are of use for monitoring. Most of these tools are based off quantitative data (spreadsheets), and with some manipulation are able to illustrate a wide range of information visual format. Specifically, Tableau Public is a free tool that allows for interactive charts and maps, which are especially useful when presenting international comparisons or large datasets.

See:

[Tableau Public](https://public.tableau.com/en-us/s/)

[Using Tableau Public to visualise data](http://www.tools4dev.org/resources/tableau-public-data-visualisation-technology-review/)

## Management Response

Typically evaluations will contain a number of recommendations for adaptation of the project in the future. When an evaluation has been finalised, the project or organisations key management structure should respond to these recommendations to explain how (and if) the recommendations made will be actioned in the future. Often this ‘management response’ to an evaluation takes the form of a recommendation-tracking matrix which links directly to the valuation recommendations, management response, responsible teams or units, and update once action is taken.

See:

[Recommendations Tracking](http://betterevaluation.org/en/evaluation-options/recommendations_tracking)

For further reading:
[Guidance for Management response to evaluations](http://www.unicef.org/evaluation/files/Management_Response_Guidelines.pdf)

# Miscellaneous Further Reading

[Handbook on Planning, Monitoring and Evaluating for Development Results (UNDP)](http://web.undp.org/evaluation/evaluations/handbook/english/documents/pme-handbook.pdf)

[Monitoring and Evaluation: Some Tools, Methods and Approaches (World Bank)](http://siteresources.worldbank.org/EXTEVACAPDEV/Resources/4585672-1251481378590/MandE_tools_methods_approaches.pdf)

[The Magenta Book Guidance for Evaluation (HM Treasury)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf)

[Ten Steps to a Results-Based Monitoring and Evaluation System (World Bank)](https://www.oecd.org/derec/worldbankgroup/35281194.pdf)

[Better Evaluation](http://betterevaluation.org/)

[intrac: Monitoring and Evaluation Planning Series](https://www.intrac.org/resources/monitoring-evaluation-special-series/)